APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,155	08/24/2001	David Carroll Challener	RPS9 2001 0045	6294

			EXAMINER
7590	09/22/2005		TRAN, TONGOC

IBM Corporation, Intellectual Property Law
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ART UNIT	PAPER NUMBER
2134	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/940,155	CHALLENER ET AL.
Office Action Summary	Examiner	Art Unit	
	Tongoc Tran	2134	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _24 August 2001_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-12_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-12_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _8/24/01_.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to Applicant's application no. 09/940,155.

Claims 1-12 are pending.

Specification

2.   The abstract of the disclosure is objected to because it exceeds 150 words in

length. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

3.   Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

In claim 1, the claim recites "encrypting normally unaccessible (AN) data... and

storing <u>said NA data...</u>". It is unclear whether said NA data is referring to the <u>encrypted</u>

<u>NA data.</u>

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Mirov et al. (U.S. Patent No. 6,138,236, hereinafter Mirov) in view of Ishibashi et al.

(U.S. Patent No. 6,654,820 hereinafter Ishibashi) and Christeson et al. (U.S. Patent No.

5,579,522, hereinafter Christeson).

In respect to claim 1, Mirov discloses a method for securing alterable data in a

managed system comprising the steps of (col. 1, lines 25-35): storing encryption keys

(col. 4, lines 42-55), encrypting normally unaccessible (NA) data with private key (col. 4,

lines 1-17, (secure (or encrypted) micro-code), storing said NA data (secure micro-

code) and accessible non-encrypted (ANE) (or unsecured micro-code) in an

unprotected electronically erasable programmable read only memory with existing write

protected algorithm (col. 3, line 55-65). Mirov discloses encrypting with asymmetrical

encryption key but not symmetrical encryption key. However, encrypting symmetrical

key is old and well known.. It would have been obvious to one of ordinary skill in the art

at the time the invention was made to implement symmetrical encryption key on Mirov's

system for its speed. Mirov discloses the micro-code is stored in an authentication

section of a memory but does not explicitly disclose but Ishibashi discloses a secure

memory only accessible only by the BIOS code (col. 6, lines 22-31). It would have been

obvious to one of ordinary skill in the art at the time the invention was made to

implement the teaching of Ishibashi's secure memory accessible by BIOS only with the

teaching of Mirov's storing of encryption key in authentication section for secure

protection of the key from being tampered by computer users. Furthermore, Mirov does

not explicitly disclose but Christeson discloses remotely altering data (Christeson, col. 2,

lines 16-19). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to incorporate Christeson's remotely altering memory with Mirov's

teaching of updating micro-code storing in the memory for the benefit of dynamically

updating without having to remove any cover or part of the computer (Christeson, col. 2,

lines 16-19).

In respect to claim 2, Mirvo, Ishibashi and Christeson disclose the method of claim 1

further comprising the steps of: altering said ANE data by issuing an existing write

request to said BIOS from said write protect algorithms for said EEPROM; and updating

said ANE data in said EEPROM (Mirvo, col. 3, lines 55-65).

In respect to claim 3, Mirvo, Ishibashi and Christeson disclose the method of

claim 1 further comprising the steps of: accessing said NA data via a change request

issued to said BIOS over a secure communication link; validating said change request;

retrieving said symmetrical encryption Key by said BIOS in response to said validated

change request; using said symmetrical encryption Key to decrypt and alter said NA

data; encrypting said altered NA data using said symmetrical encryption Key; and

storing said altered encrypted NA data in said EEPROM (Christeson, Fig. 5 and 6, col.

10, line 54-col. 12, line 67).

In respect to claim 4, Mirvo, Ishibashi and Christeson disclose the method of

claim 1 further comprising the steps of: hashing said ANE data and encrypting said

Hash with said symmetrical encryption Key; storing said encrypted Hash with said ANE

data; computing a Hash of configuration data in said ANE data on a boot-up request;

decrypting said stored encrypted Hash of said configuration data; comparing said

decrypted Hash of said stored configuration data to said computed Hash of said

configuration data from said ANE data; booting normally in response to a compare of

said decrypted Hash and said computed hash; and issuing tamper notification and

initiating recovery processes on a non-compare of said decrypted Hash and said

computed hash (Mirvo, col. 2, 21-32 and col. 3, line 55-col. 5, line 50).

I   In respect to claims 5-12, the claimed limitations computer program product and

system that are substantially similar to method claims 1-4. Therefore, claims 5-12 are

rejected based on the similar rationale.

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

-Cromer et al. Disclose protecting information on a computer readable medium.

-Cromer et al. Disclose data processing system and method for password

protecting a boot device.

-Laczko et al. Disclose a secure computing device having boot read only memory

verification of program code.

-Dunham et al. Disclose password protecting rom based utilities in an adapter

rom.

-Cromer et al. Disclose a computer system having flash memory bios which can

be accessed remotely while protected mode operating system is running.

-Cummins discloses computer software encryption apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (571) 272-3843. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Tongoc Tran
Art Unit: 2134

September 16, 2005

GREGORY MORSE
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